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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,155	08/04/2000	CHRISTINE PECINA	102689-42/00-U0072	2098
21125	7590	11/26/2004		
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			EXAMINER PARTON, KEVIN S	
			ART UNIT 2153	PAPER NUMBER
			DATE MAILED: 11/26/2004	

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/633,155

Applicant(s)

PECINA ET AL.

Examiner

Kevin Parton

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 08/30/2004 have been fully considered but they are not persuasive. Please see the following reasons and the grounds of rejection below.
2. On page 7, paragraph 1, the applicant argues that the Klein reference fails to teach databases that are specifically "configuration databases that contain configuration data for operating a network device." The argument is not persuasive because the claim does not point out that the databases must contain configuration data for operating a network device. The schema of and information stored in the databases of Klein can be referred to as configuration data and thus they are configuration databases.
3. In the same paragraph, the applicant further argues that the reference to Klein fails to teach that the updating takes place without disrupting "operation of the network device and the first configuration database." The argument is not persuasive because the operation of the network device and the database are not interrupted. The database may go offline, but it is never out of operation. Further, due to the high speed transfer used (as shown in figure 2B); the operation of the system as seen by a user is not disrupted.
4. On page 7, paragraph 3 – page 8, paragraph 4, the applicant argues that Klein fails to teach the replication of changes until commitment of those changes is detected. The argument is not persuasive because the reference shows in figure 2A, step 210 that before the changes are to be loaded onto the primary database, they are loaded

onto the secondary database and that database is rebooted with the new software.

This successful reboot is the detection of changes.

5. All further arguments are not persuasive for the same reasons shown above.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein et al. (USPN 6,157,832).
8. Regarding claim 1, Klein et al. (USPN 6,157,832) teach a system for operating a network device including an embedded first configuration database and an embedded second configuration database with means for:
- a. Operating the network device with the first configuration database as a primary configuration database (figure 1, element 125; column 3, lines 66-67).
  - b. Operating the network device with the second configuration database as a backup configuration database (figure 1, element 130; column 4, lines 3-4).

- c. Replicating modifications made to the first configuration database to the second configuration database (column 4, lines 17-22; column 5, lines 3-8)
  - d. Detecting a configuration database upgrade operation (figure 2a; column 5, lines 24-26).
  - e. Stopping replication of data from the first configuration database to the second configuration database (column 5, lines 9-13).
  - f. Upgrading the second configuration database without disrupting operation of the network device and the first configuration database (column 5, lines 24-27).
  - g. Switching over to use the second configuration database as the primary configuration database (column 6, lines 19-22).
9. Regarding claim 2, Klein et al. (USPN 6,157,832) teach all the limitations as applied to claim 1. They further teach means for:
- a. Detecting commitment of configuration database upgrade (column 6, lines 33-37).
  - b. Operating the network device with the first configuration database as a backup database (column 6, lines 51-54, 60-64).
  - c. Replicating modifications made to the second configuration database to the first configuration database (column 6, lines 51-54, 60-64).
10. Regarding claim 3, Klein et al. (USPN 6,157,832) teach all the limitations as applied to claim 1. They further teach means for:

- a. Detecting errors with the configuration database upgrade (column 6, lines 33-37).
- b. Switching over to use the first configuration database as the primary configuration database (column 7, lines 25-35).

11. Regarding claim 4, Klein et al. (USPN 6,157,832) teach all the limitations as applied to claim 1. They further teach means for receiving a configuration control file from a network management server, and executing the configuration control file (column 8, lines 48-52).

12. Regarding claim 18, Klein et al. (USPN 6,157,832) teach all the limitations as applied to claim 2. They further teach means for saving the upgraded second configuration database to persistent memory (column 4, lines 10-22).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (USPN 6,157,832) in view of Nilsson (USPN 6,081,811).

15. Regarding claim 5, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 4) shows substantial features of the claimed invention, it fails to disclose means for:

- a. Receiving a data definition language (DDL) file including structured query language (SQL) commands.
- b. Wherein executing the configuration control file comprises executing the SQL commands to construct an upgraded database schema in the second configuration database.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Nilsson (USPN 6,081,811).

In an analogous art, Nilsson (USPN 6,081,811) discloses a system for database conversion with means for:

- a. Receiving a data definition language (DDL) file including structured query language (SQL) commands (column 8, lines 11-24).
- b. Wherein executing the configuration control file comprises executing the SQL commands to construct an upgraded database schema in the second configuration database (column 8, lines 11-24).

Given the teaching of Nilsson (USPN 6,081,811), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of a DDL with SQL to provide the database updates. This benefits the system because SQL is standard for database usage and allows the system to support several different database vendors.

16. Regarding claim 19, Klein et al. (USPN 6,157,832) teach a system for managing a network with means for:

Art Unit: 2153

- a. Operating the network device with the first configuration database as a primary configuration database (figure 1, element 125; column 3, lines 66-67).
- b. Operating the network device with the second configuration database as a backup configuration database (figure 1, element 130; column 4, lines 3-4).
- c. Replicating modifications made to the first configuration database to the second configuration database (column 4, lines 17-22; column 5, lines 3-8)
- d. Replicating the changes to the first configuration database to the second configuration database (column 4, lines 17-22; column 5, lines 3-8).
- e. Stopping replication of data from the first configuration database to the second configuration database (column 5, lines 9-13).
- f. Upgrading the second configuration database without disrupting operation of the network device and the first configuration database (column 5, lines 24-27).
- g. Switching over to use the second configuration database as the primary configuration database (column 6, lines 19-22).

Although the system disclosed by Klein et al. (USPN 6,157,832) shows substantial features of the claimed invention, it fails to disclose:



- a. Sending SQL commands from network management server to the network device.
- b. Executing the SQL commands to write a software load record indicating a configuration database upgrade in a table within the first configuration database.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Nilsson (USPN 6,081,811).

In an analogous art, Nilsson (USPN 6,081,811) discloses a system for database upgrades with means for:

- a. Sending SQL commands from network management server to the network device (column 8, lines 11-24).
- b. Executing the SQL commands to write a software load record indicating a configuration database upgrade in a table within the first configuration database (column 8, lines 11-24).

Given the teaching of Nilsson (USPN 6,081,811), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of SQL to provide the database updates. This benefits the system because SQL is standard for database usage and allows the system to support several different database vendors.

17. Claims 6, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (USPN 6,157,832) in view of Waldin et al. (USPN 6,651,249).

18. Regarding claim 6, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means for receiving an upgrade notification from a network management system server.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Waldin et al. (USPN 6,651,249).

In an analogous art, Waldin et al. (USPN 6,651,249) discloses a system for distributed software update with means for receiving an upgrade notification from a network management system server (column 3, lines 9-10; column 4, lines 3-4).

Given the teaching of Waldin et al. (USPN 6,651,249), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of a server to provide update notification. This benefits the system by allowing a server to provide updates and ensuring that the updated software is the single, most up to date version.

19. Regarding claim 13, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means for receiving upgraded applications from a network management server.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Waldin et al. (USPN 6,651,249).

In an analogous art, Waldin et al. (USPN 6,651,249) discloses a system for distributed software update with means for receiving upgraded applications from a network management server (column 3, lines 9-10; column 4, lines 3-4).

Given the teaching of Waldin et al. (USPN 6,651,249), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of a server to provide upgraded applications. This benefits the system by allowing a server to provide upgraded applications and ensuring that the updated software is the single, most up to date version.

20. Regarding claim 14, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means for receiving new applications from a network management server.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Waldin et al. (USPN 6,651,249).

In an analogous art, Waldin et al. (USPN 6,651,249) discloses a system for distributed software update with means for receiving new applications from a network management server (column 3, lines 9-10; column 4, lines 3-4).

Given the teaching of Waldin et al. (USPN 6,651,249), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of a server to provide

new applications. This benefits the system by allowing a server to provide new applications and ensuring that the new software is the single, most up to date version.

21. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (USPN 6,157,832) and Waldin et al. (USPN 6,651,249) as applied to claim 6 above, and further in view of Nilsson (USPN 6,081,811).

22. Regarding claim 7, although the system disclosed by Klein et al. (USPN 6,157,832) and Waldin (as applied to claim 6) shows substantial features of the claimed invention, it fails to disclose means for receiving SQL commands from the network management server and executing the SQL commands.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832) and Waldin et al. (USPN 6,651,249), as evidenced by Nilsson (USPN 6,081,811).

In an analogous art, Nilsson (USPN 6,081,811) discloses a system for database conversion with means for receiving SQL commands from the network management server and executing the SQL commands (column 8, lines 11-24).

Given the teaching of Nilsson (USPN 6,081,811), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) and Waldin et al. (USPN 6,651,249) by employing the use of SQL to provide the database updates. This benefits the system because SQL is standard for database usage and allows the system to support several different database vendors.

23. Regarding claim 8, Klein et al. (USPN 6,157,832) teaches the limitations as applied to claim 7. They further teach means for writing a software load record indicating a configuration database upgrade in a table in the first configuration database (column 8, lines 48-52).

24. Regarding claim 9, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 8) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the table comprises a software management system table.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Waldin et al. (USPN 6,651,249).

In an analogous art, Waldin et al. (USPN 6,651,249) discloses a system for distributed software updates with means wherein the table comprises a software management system table (column 3, lines 9-10; column 4, lines 3-4).

Given the teaching of Waldin et al. (USPN 6,651,249), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing software management tables. This benefits the system by allowing an accurate record of upgrades and updates to be kept.

25. Regarding claim 10, although the system disclosed by Klein et al. (USPN 6,157,832) and Waldin (as applied to claim 6) shows substantial features of the claimed

Art Unit: 2153

invention, it fails to disclose means wherein the SQL commands are received within a DDL file.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832) and Waldin et al. (USPN 6,651,249), as evidenced by Nilsson (USPN 6,081,811).

In an analogous art, Nilsson (USPN 6,081,811) discloses a system for database conversion with means wherein the SQL commands are received within a DDL file (column 8, lines 11-24).

Given the teaching of Nilsson (USPN 6,081,811), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing the use of a DDL with SQL to provide the database updates. This benefits the system because SQL is standard for database usage and allows the system to support several different database vendors.

26. Regarding claim 11, although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 8) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the table comprises a software management system table.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832), as evidenced by Waldin et al. (USPN 6,651,249).

In an analogous art, Waldin et al. (USPN 6,651,249) discloses a system for distributed software updates with means wherein the table comprises a software management system table (column 3, lines 9-10; column 4, lines 3-4).

Given the teaching of Waldin et al. (USPN 6,651,249), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by employing software management tables. This benefits the system by allowing an accurate record of upgrades and updates to be kept in the database.

27. Regarding claim 12, Klein et al. (USPN 6,157,832) teaches all the limitations as applied to claim 11. They further teach means for causing the second configuration database to cease replicating data changes made to the first configuration database (column 5, lines 9-13).

28. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (USPN 6,157,832).

29. Regarding claim 15, Klein et al. (USPN 6,157,832) teaches all the limitations as applied to claim 1. They further teach a first processor component and means for maintaining the first configuration database through the first processor component and operating the first processor component as a primary processor component (figure 1, element 125; column 3, lines 66-67).

Although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose specifically a first printed circuit board.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by specifically pointing out the use of a printed circuit board in the construction of the primary and secondary machines. This allows the system to function and is a very common method of implementing computer instructions.

30. Regarding claim 16, Klein et al. (USPN 6,157,832) teaches all the limitations as applied to claim 15. They further teach a second processor component and means for maintaining the second configuration database through the second processor component and operating the second processor component as a backup processor component (figure 1, element 125; column 3, lines 66-67).

Although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose specifically a second printed circuit board.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by specifically pointing out the use of a printed circuit board in the construction of the primary and secondary machines. This allows the system to function and is a very common method of implementing computer instructions.



31. Regarding claim 17, Klein et al. (USPN 6,157,832) teach all the limitations as applied to claim 16. They further teach means for switching over to use the second processor component as the primary processor (column 6, lines 19-22).

Although the system disclosed by Klein et al. (USPN 6,157,832) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose specifically a second printed circuit board.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Klein et al. (USPN 6,157,832).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Klein et al. (USPN 6,157,832) by specifically pointing out the use of a printed circuit board in the construction of the primary and secondary machines. This allows the system to function and is a very common method of implementing computer instructions.

### ***Conclusion***

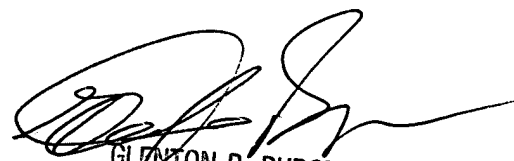
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (571)272-3958. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton  
Examiner  
Art Unit 2153

ksp



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